

WHAT IS CLAIMED IS:

1. A semiconductor module comprising:
 - a semiconductor chip having a first surface and a second surface;
 - a first electrode plate contacting the first surface of the semiconductor chip;
 - a second electrode plate contacting the second surface of the semiconductor chip; and
 - a resin mold for sealing the first and second electrode plates and the semiconductor chip,wherein the resin mold includes an inner pressure release portion for releasing an inner pressure in the resin mold.
2. The module according to claim 1,
 - wherein the first electrode plate includes a first electrode and a signal terminal, which protrude from the resin mold, and
 - wherein the second electrode plate includes a second electrode, which protrudes from the resin mold.
3. The module according to claim 1,
 - wherein the inner pressure arises in the resin mold in a case where the semiconductor chip works in abnormal operations.
4. The module according to claim 1',
 - wherein the first electrode plate includes a body, which is exposed outside of the resin mold, and
 - wherein the second electrode plate includes a body, which is

exposed outside of the resin mold.

5. The module according to claim 1,
wherein the semiconductor chip is sandwiched by the first and second electrode plates, and embedded in the resin mold.

6. The module according to claim 1,
wherein the inner pressure release portion is made of resin material having low adhesiveness to the resin mold, and
wherein the inner pressure release portion is a resin rod embedded in the resin mold.

7. The module according to claim 6,
wherein the resin rod extends from a surface of the semiconductor chip to outside of the resin mold.

8. The module according to claim 7,
wherein the resin mold includes a hole,
wherein the resin rod is inserted into the hole of the resin mold, and
wherein the resin rod is removable from the hole so that a clearance is formed between the resin rod and the hole.

9. The module according to claim 8,
wherein the inner pressure release portion works in such a manner that the inner pressure in the resin mold is released through the clearance between the resin rod and the hole.

10. The module according to claim 8,
wherein the resin rod is capable of being pushed out of the
hole.

11. The module according to claim 10,
wherein the inner pressure release portion works in such a
manner that the inner pressure in the resin mold is released through
the hole after the resin rod drops out of the hole.

12. A semiconductor module comprising:
a semiconductor chip having a first surface and a second
surface;
a first electrode plate contacting the first surface of the
semiconductor chip;
a second electrode plate contacting the second surface of the
semiconductor chip; and
a resin mold for sealing the first and second electrode plates
and the semiconductor chip,
wherein each of the first and second electrode plates includes
an inner pressure release portion for releasing an inner pressure
in the resin mold.

13. The module according to claim 12,
wherein the first electrode plate includes a first electrode
and a signal terminal, which protrude from the resin mold, and
wherein the second electrode plate includes a second electrode,
which protrudes from the resin mold.

14. The module according to claim 12,
wherein the inner pressure arises in the resin mold in a case
where the semiconductor chip works in abnormal operations.

15. The module according to claim 12,
wherein the first electrode plate includes a body, which is
exposed outside of the resin mold, and
wherein the second electrode plate includes a body, which is
exposed outside of the resin mold.

16. The module according to claim 12,
wherein the semiconductor chip is sandwiched by the first and
second electrode plates, and embedded in the resin mold.

17. The module according to claim 12,
wherein the inner pressure release portion is a starting point
for deforming the first and second electrode plates so that the inner
pressure is released.

18. The module according to claim 17,
wherein the starting point does not overlap the first and
second semiconductor chips.

19. The module according to claim 17,
wherein each of the first and second electrode plates includes
the starting point and an other portion, and
wherein the other portion is deformable so that a clearance

is formed between the other portion and the resin mold.

20. The module according to claim 19,
wherein the inner pressure release portion works in such a manner that the inner pressure in the resin mold is released through the clearance.

21. The module according to claim 17,
wherein the inner pressure release portion is a concavity or a convexity for deforming the first and second electrode plates so that the inner pressure is released.